

Breewood Manor

Green Streets



Quick Facts

Watershed:	Anacostia River
Sub-Watershed:	Sligo Creek
Completion Year:	2015
Impervious Area Treated:	1.51 acres
Maryland DNR Trust Fund Grant Award:	\$431,412

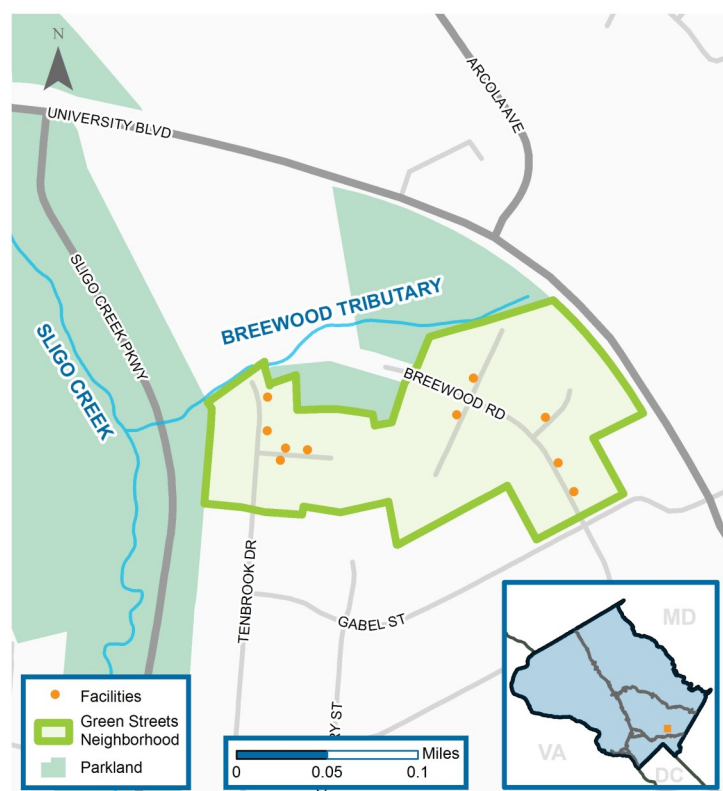
Pre-Restoration Conditions

Much of the development in the Sligo Creek sub-watershed occurred before today's stormwater management practices were in place. In the Breewood Manor neighborhood, stormwater runs off roofs, driveways, and roads into storm drains and directly into the Breewood Tributary, sometimes carrying trash, oils or pollutants. The runoff also moves rapidly over paved surfaces, causing higher flows during storms, erosion, streambank instability, and degraded habitat.

Design Approach

Green streets project locations were identified in the portion of the neighborhood that drains to the restored Breewood Tributary. Ten raingardens and bioretention rain garden facilities were installed in grassy areas between the sidewalk and curb at locations free of constraints such as underground utilities and trees.

Stormwater flowing along the road curb enters the gardens through concrete inlet structures. Once in the facility, water soaks through plants, mulch, roots, and soil into the groundwater. Sediment, nutrients and other pollutants are removed and the volume of surface runoff is reduced. Higher levels of groundwater provide a healthy year-round baseflow in Breewood Tributary and healthy habitat for fish.



Water Quality Protection

DEP restoration projects help reduce sediment and nutrient pollution entering local waterways and the Chesapeake Bay.

Nitrogen
Reduced
14.6
lbs/yr

Phosphorus
Reduced
1.35
lbs/yr

Sediment
Reduced
686
lbs/yr

During-Construction



Excavation of a bioretention rain garden. Rain gardens have multiple layer to treat and infiltrate stormwater.

During-Construction



Installation of gravel, underdrain and observation well in new bioretention. Gravel helps stormwater infiltrate.

Post-Construction



Tenbrook Drive bioretention rain garden facility one year after construction (summer).

Post-Construction



Tenbrook Drive bioretention rain garden facility in the spring. Different plants bloom throughout the year.

Post-Construction



Tenbrook bioretention facility three years after construction (summer). The plants have grown significantly.

Post-Construction



Tenbrook Drive bioretention facility three years after construction (winter).

Contact Us:

AskDEP@montgomerycountymd.gov



This project was funded by Maryland's Chesapeake & Atlantic Coastal Bays Trust Fund and Montgomery County's Water Quality Protection Charge